



File

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I**

11 Technology Dr., Chelmsford, MA 01863

Memorandum

Date: December 5, 2001

Subj: Amtrak - North Station, Boston, MA
Compliance Evaluation Inspection (CEI)
NPDES Permit No. MA0028941

From: Rich Fisher, Environmental Engineer
USEPA/OEME/EIA

To: Steve Couto, Environmental Engineer
USEPA/OES/SEW

On September 11 and 28, 2001, I conducted a NPDES Compliance Evaluation Inspection (CEI) at the Massachusetts Bay Transportation Authority (MBTA) - North Station (the "facility") located on Causeway Street in Boston, MA. Gina Snyder (EPA) also conducted the inspection on September 11. Rob Graham, Manager, Environmental - New England Division for Amtrak, was the primary contact who provided a tour of the facility. Amtrak operates the rail operations for MBTA and is currently specified on the NPDES permit. Although Mr. Graham has signatory authority for Discharge Monitoring Reports (DMR's), he specified that Kevin Lydon, General Manager, Commuter Operations, is the responsible official. Mr. Lydon was not present during the inspection. Mr. Graham thinks the permit was transferred from MBTA to Amtrak when Amtrak assumed the contract for rail operations in 1987.

There are ten sets of rails with two rail lines per platform at the station. Troughs running adjacent to each platform have drains which collectively discharge to an oil/water (O/W) separator that discharges to the Charles River. The ongoing Central Artery/Third Harbor Tunnel (CA/T) construction project is taking place within and adjacent to the rail platform area. Ventilation Building #8 (contract C19E4) and bridge construction (contract C19D1) are taking place adjacent to Tracks 1, 2, and 3. Leverett Circle Connector tunnel construction (contract C19E1) is taking place adjacent to Tracks 9 and 10. CA/T construction in this area sometimes requires the removal of sections of platforms. According to Mr. Graham, sections of Platforms A and E had been removed as part of the construction. These two platforms are located on each end of the station (Picture Nos. 3 and 6 from the 9/11 inspection and Nos. 6 and 21 from the 9/28 inspection). Mr.

Graham stated that no CA/T stormwater or construction dewatering discharge is occurring or designed to occur either on the tracks or through the separator, although he has no other information pertaining to the CA/T discharge. An inspection of the site with CA/T personnel indicated that CA/T stormwater and/or dewatering discharges are occurring through the North Station track drainage system. Authorization was not granted by Amtrak, the permit holder, based on information acquired during CA/T and Amtrak inspections. The owner, MBTA, was not contacted during the inspections.

Mike Stern, Amtrak attorney, stated in a November 30 email to EPA, that track flooding was reported in the late afternoon of November 21, 2001 by Amtrak personnel. A 1" hose at full pressure was described as directed through the fence from the CA/T site, under Track 1, and was then discharging into the Track 1 drainage system. Amtrak had not given authorization for this discharge. Mr. Stern stated that he did not think MBTA had given authorization either, since MBTA had not communicated any such authorization to Amtrak. CA/T discontinued the discharge a short time after Amtrak notified them of the discharge.

Mr. Graham stated that although the separator was designed to handle track drainage at the station, the Fleet Center may have tied in roof drainage and parking garage (owned by MBTA) drainage to the separator approximately five years ago. An October 31, 2001 letter from Amtrak to EPA (see attached) cites anecdotal evidence and field observations as the source of this information. Amtrak has received no correspondence from MBTA concerning these discharges.

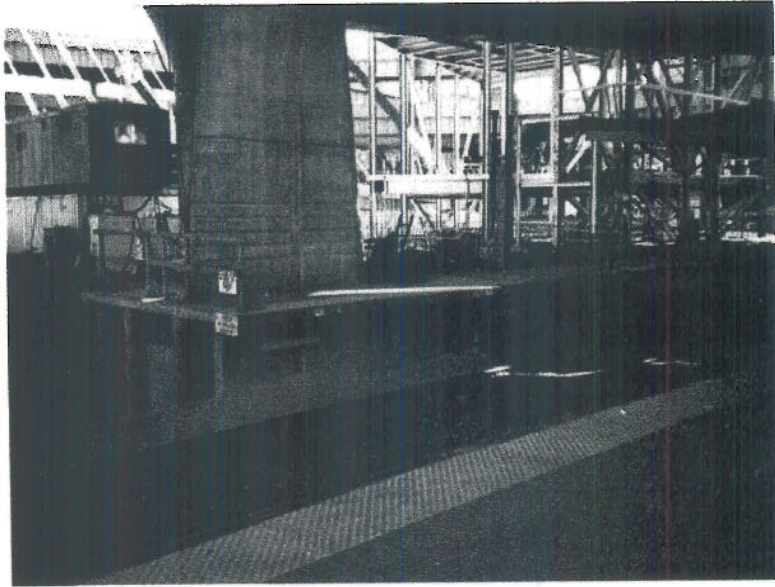
Mr. Graham stated that train maintenance activities had been transferred to the Boston Engine Terminal at 70 Rear 3rd Ave., Somerville, MA in the early to mid 1980's. He stated that the station is used only for passenger pickup and dropoff. Sand and oil observed on Track 10 are from a brake system test (Picture No. 3 (9/28)) according to Mr. Graham.

According to Mr. Graham, CA/T had tied dewatering and runoff discharges from adjacent construction operations into the O/W separator in 1999. He stated that this was discovered by Amtrak personnel when monthly inspections of the solids level in the separator indicated a dramatic increase. According to the monthly inspection logs, the level of solids increased from approximately 0 ft in January to over 3 ft in September. Mr. Graham stated that CA/T had agreed to incur the cost of the cleanup since they were identified as the cause (see attached 8/27/99 letter from CA/T to Amtrak). He had stated at the time of the inspection that these unauthorized connections have not occurred since then.

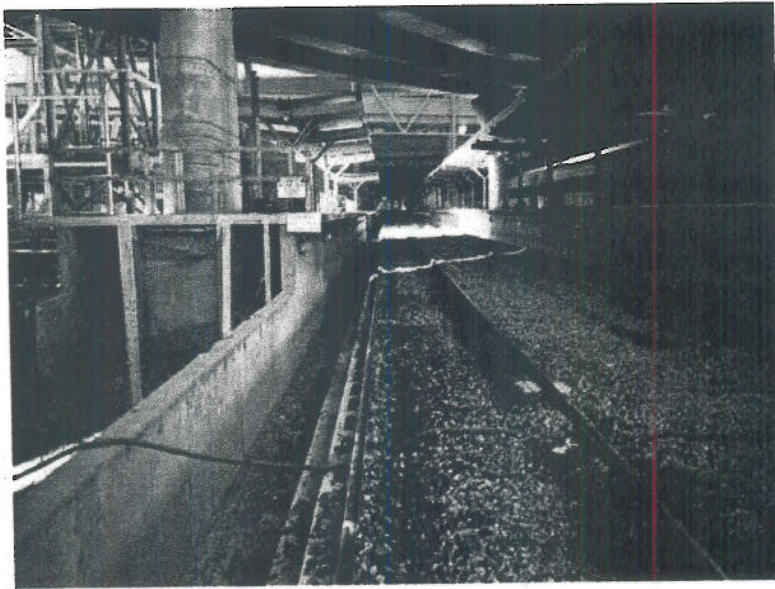
Amtrak estimates flow during monthly inspections and contracts Environmental Sampling Technology to collect monthly grab samples to determine pH and oil & grease levels. Monthly grab samples are preserved with sulfuric acid and analyzed for oil & grease at Amro Environmental Laboratories in Merrimack, NH using EPA Method 413.1. Mr. Graham stated that discharge samples are collected in the final separator chamber because the actual outfall has been submerged since the river level increased due to the construction of a flood control station in the mid 1980's.

During the inspection, a sludge judge was used to determine the sludge blanket to be approximately 10" in the first chamber and 1' in the second chamber. A sheen was observed on the surface of the contents of the first chamber, which appeared black and had a petroleum odor. Debris was present in the second chamber. Best management practices (BMP's) were present between the separator and the river in the form of hay bales (Picture Nos. 10, 12, and 13 from the 9/11 inspection). A boom with a curtain was present at the discharge to the river (Picture 18 from the 9/11 inspection). An oil sheen was present in the vicinity of the outfall.

Observations during the inspection indicate that areas of construction activity are not entirely hydraulically separated from the track drainage. Pictures Nos. 3 and 6 from the 9/11 inspection and 10, 14, 16, 17, and 19 from the 9/28 inspection show construction activity adjacent to the area of Platform A and where a section of Platform A has been removed. Construction debris can be seen in the drainage channels. Of the two drains checked in the Track 1 drainage channel, one had a screen mesh and the other did not. Three drains checked in the Track 9 drainage channel indicated either no filter fabric or ripped filter fabric in each. Pictures Nos. 1, 6, 7, and 21 from the 9/28 inspection show the construction activity adjacent to Tracks 9 and 10 as well as the area where Platform E has been removed by CA/T.



#3 - Amtrak-North Station, Boston, MA - 9/11/01
Platform A removed in view toward vent building construction.



#6 - Amtrak-North Station, Boston, MA - 9/11/01
Along track drainage channel by Platform A.



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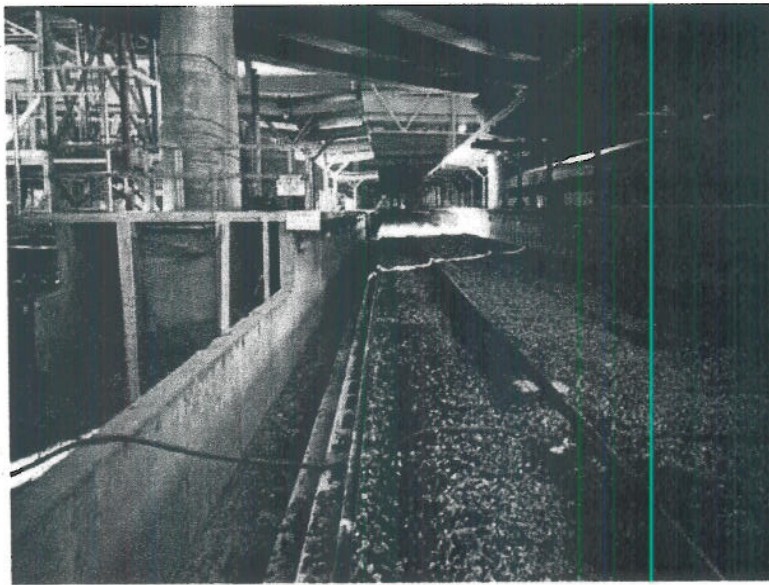
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#3 - Amtrak-North Station, Boston, MA - 9/11/01
Platform A removed in view toward vent building construction.



#6 - Amtrak-North Station, Boston, MA - 9/11/01
Along track drainage channel by Platform A.



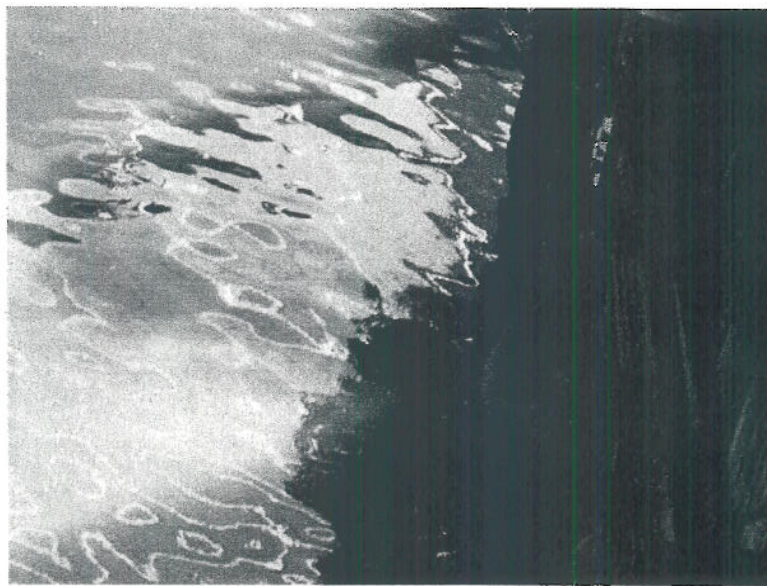
#10 - Amtrak-North Station, Boston, MA - 9/11/01
BMP's between oil/water separator and outfall.



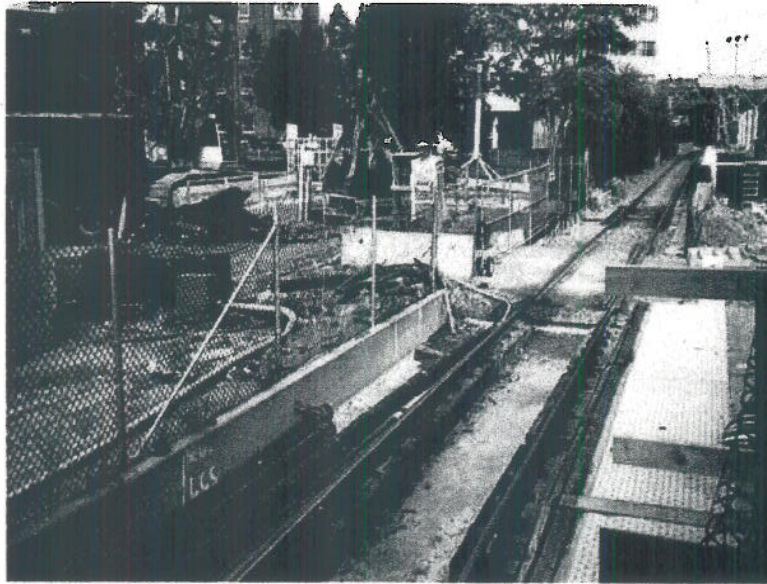
#12 - Amtrak-North Station, Boston, MA - 9/11/01
BMP's between oil/water separator and outfall.



#13 - Amtrak-North Station, Boston, MA - 9/11/01
BMP's between oil/water separator and outfall.



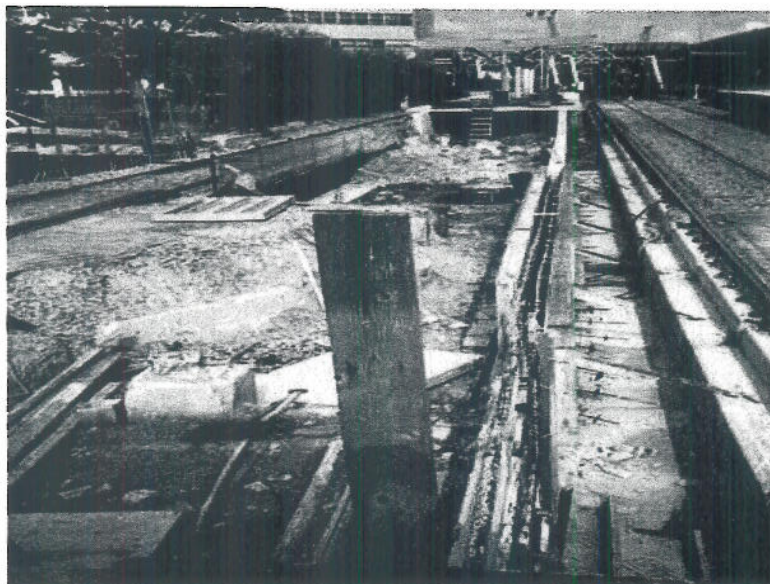
#18 - Amtrak-North Station, Boston, MA - 9/11/01
Boom/curtain at oil/water separator outfall.



#1 - Amtrak-North Station, Boston, MA - 9/28/01
Track 10 area.



#3 - Amtrak-North Station, Boston, MA - 9/28/01
Sand and oil on Track 10; sand from a brake system test.



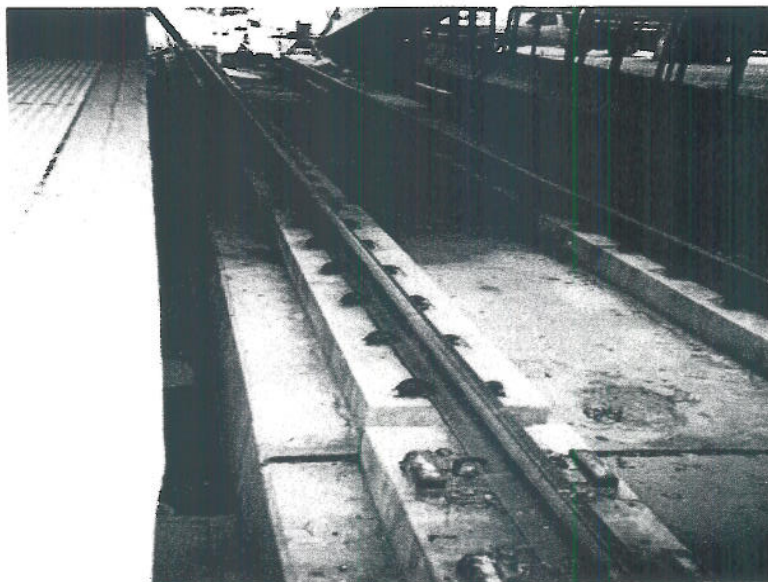
#6 - Amtrak-North Station, Boston, MA - 9/28/01
Removal of Platform E; track 9 drainage channel.



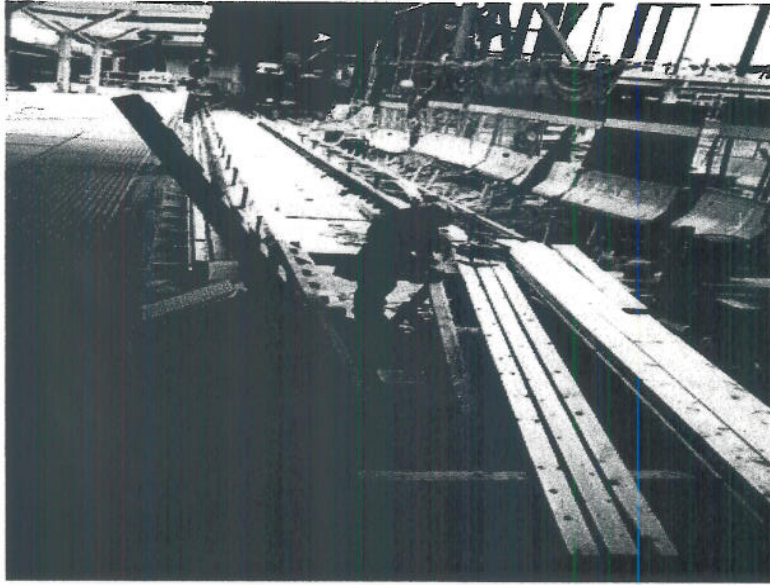
#7 - Amtrak-North Station, Boston, MA - 9/28/01
Track 10 area.



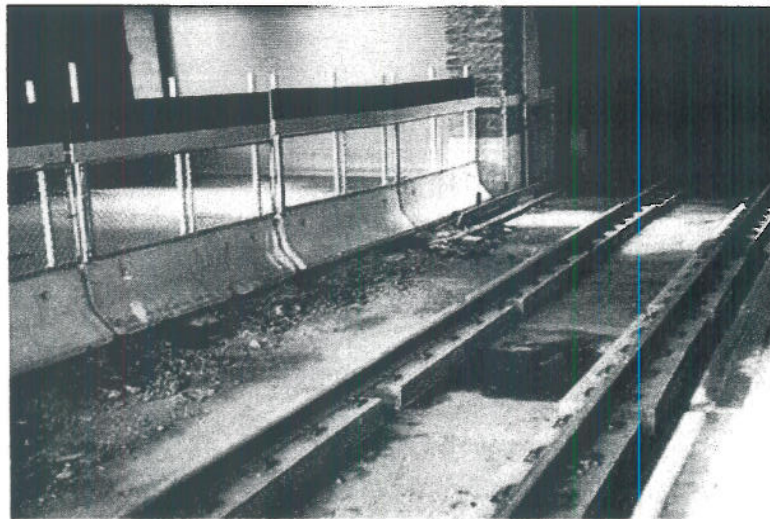
#10 - Amtrak-North Station, Boston, MA - 9/28/01
Down Platform A in direction of oil/water separator.



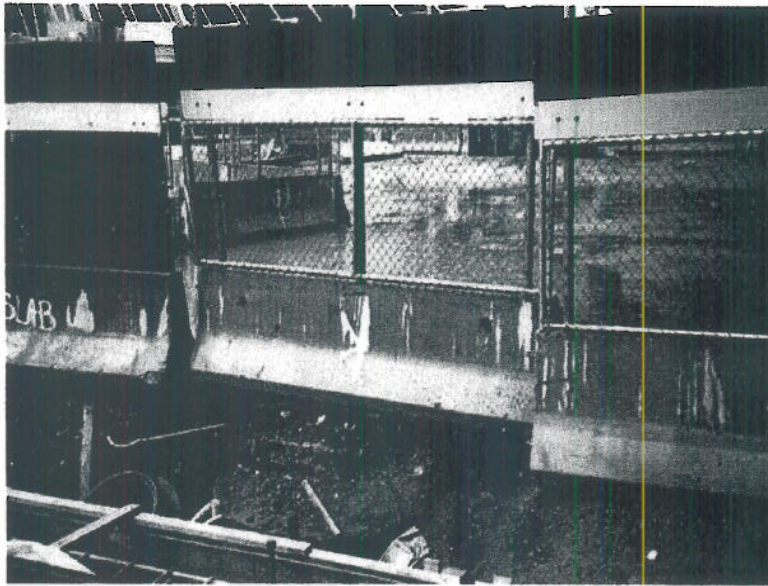
#14 - Amtrak-North Station, Boston, MA - 9/28/01
Track 1 area with its drainage channel.



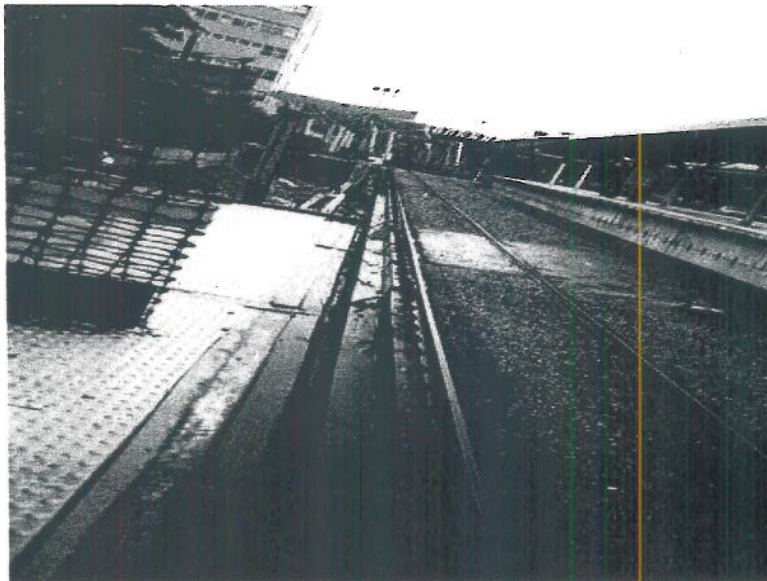
#16 - Amtrak-North Station, Boston, MA - 9/28/01
Track 1 area with its drainage channel.



#17 - Amtrak-North Station, Boston, MA - 9/28/01
Track 1 area with its drainage channel.



#19 - Amtrak-North Station, Boston, MA - 9/28/01
Track 1 area separated from CA/T and Fleet by jersey barriers during a brief rain shower.



#21 - Amtrak-North Station, Boston, MA - 9/28/01
Track 9 area during a brief rain shower.

CERTIFIED MAIL # 7000 0600 0029 0378 6985
Return Receipt Requested



October 31, 2001

Richard Fisher
U.S. Environmental Protection Agency – Region 1
New England Regional Laboratory
11 Technology Drive
North Chelmsford, Massachusetts 01863

Re: North Station Storm Water Drainage

Dear Mr. Fisher:

I am writing to you in response to your request for information concerning storm water drainage at North Station in Boston, Massachusetts. This facility is owned by the Massachusetts Bay Transportation Authority (MBTA) and operated by Amtrak under contract to the MBTA.

Following your tours of North Station on September 11 and September 28, 2001, you sent me an email message requesting further information. In accordance with your request, the documents listed below are enclosed for your review:

1. Oil/water separator inspection logs for each month during 1999.
2. August 27, 1999 letter from Central Artery/Tunnel Project regarding reimbursement for oil/water separator cleanup.
3. Second and Third Quarter 1999 Discharge Monitoring Reports for North Station.

Amtrak has not received any correspondence from the MBTA concerning the collection and discharge of storm water runoff from the Fleet Center roof or the pumping and discharge of ground water from the Fleet Center garage. However, anecdotal information and some field observations made by Amtrak personnel suggest that there is a connection between the Fleet Center garage pumps and the oil/water separator.

With regard to your request for the name of someone who could assist you in obtaining drawings showing drainage at North Station, please direct your inquiries to:

Anna Barry
Director of Railroad Operations
Massachusetts Bay Transportation Authority
10 High Street
Boston, MA 02110

Richard Fisher
October 31, 2001
Page 2

If you have questions concerning the enclosed information, or if you require additional information, please do not hesitate to contact me at (617) 345-7534.

Sincerely,

A handwritten signature in cursive script that reads "Robert L. Graham".

Robert L. Graham
Manager of Environmental
New England Division

Enclosures

cc: K. Lydon, Amtrak (w/o enclosures)
J. Prugh, Amtrak (w/o enclosures)
D. Schevis, Amtrak (w/o enclosures)
R. Simon, Amtrak (w/o enclosures)
S. Butterfield, Amtrak (w/o enclosures)
C. LoRusso, Amtrak (w/o enclosures)
C. Caldwell, Amtrak (w/o enclosures)
M. Stern, Amtrak (w/o enclosures)
R. MacCormack, MBTA (w/o enclosures)



Massachusetts Turnpike Authority
Central Artery/Tunnel Project

August 27, 1999

File: CO-16.13.01.01
CO-16.13.01.19
No: L-406

Mr. Robert Simon
Engineering Department
Amtrak - Commuter Rail
32 Cobble Hill Road
Somerville, MA 02143

Subject: Central Artery (I-93)/Tunnel (I-90) Project
AMTRAK / MHD Force Account Agreements
Cleaning of the Oil/Water Separator

Dear Mr. Simon:

The cleaning of the Oil/Water Separator at North Station has been an area of concern for both Amtrak and the Project for some time. Because cleaning of the Oil/Water Separator requires work to be performed under confined space requirements and due to the subsequent delay in submittal procedures and approvals, the CA/T requests that Amtrak perform the work to expedite the cleaning.

Please submit an order of magnitude estimate as soon as possible to complete this work. Upon receipt, B/PB will obtain formal work order approval. If you have any questions, please call Tim Quinn at 951-6191.

Sincerely,

BECHTEL/PARSONS BRINCKERHOFF

Ronald D. O'Brien
Authorized Representative

RDO/THQ/ps

cc: T. Quinn (03-6X-05)
G. Mekulsia (31-XX-04)
R. Johnson (MBTA)

RECEIVED FROM RA.SIMON 8/31/99